

HOBBS COO
OCT 09 2018
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EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Condor 32 State Com
#614H
OH

Design: OH

Midland PVA

19 July, 2018





Midland PVA



Company: EOG Resources - Midland	Local Co-ordinate Reference: Well #614H
Project: Lea County, NM (NAD 83 NME)	TVD Reference: KB = 25 @ 3365.0usft
Site: Condor 32 State Com	MD Reference: KB = 25 @ 3365.0usft
Well: #614H	North Reference: Grid
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: OH	Database: EDM 5000.14

Project Lea County, NM (NAD 83 NME)			
Map System: US State Plane 1983	System Datum: Mean Sea Level		
Geo Datum: North American Datum 1983			
Map Zone: New Mexico Eastern Zone			

Site Condor 32 State Com			
Site Position:	Northing: 394,016.00 usft	Latitude: 32° 4' 49.616 N	
From: Map	Easting: 801,320.00 usft	Longitude: 103° 29' 38.138 W	
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.45 °	

Well #614H			
Well Position +N/-S 0.0 usft	Northing: 394,082.00 usft	Latitude: 32° 4' 50.270 N	
+E/-W 0.0 usft	Easting: 801,320.00 usft	Longitude: 103° 29' 38.132 W	
Position Uncertainty 0.0 usft	Wellhead Elevation: usft	Ground Level: 3,340.0 usft	

Wellbore OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/7/2018	6.83	59.93	47,787.63352829

Design OH					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.0			
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	356.37	



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Survey Program	Date	7/19/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
90.0	900.0	Wildfire MWD (OH)	MWD	OWSG MWD - Standard	
1,086.0	19,850.0	MS MWD (OH)	MWD	OWSG MWD - Standard	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Buil (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
90.0	0.30	90.39	90.0	0.0	0.2	0.33	0.33	0.00	0.0	0.0
95.0	0.40	6.39	95.0	0.0	0.3	9.48	2.00	-1,680.00	0.0	0.0
129.0	0.60	210.39	129.0	0.0	0.2	2.88	0.59	-458.82	0.0	0.0
157.0	0.40	130.39	157.0	-0.2	0.2	2.36	-0.71	-285.71	0.0	0.0
186.0	0.10	182.39	186.0	-0.3	0.3	1.20	-1.03	179.31	0.0	0.0
214.0	0.30	100.39	214.0	-0.3	0.3	1.08	0.71	-292.86	0.0	0.0
242.0	0.10	238.39	242.0	-0.4	0.4	1.36	-0.71	492.86	0.0	0.0
273.0	0.40	118.39	273.0	-0.4	0.4	1.48	0.97	-387.10	0.0	0.0
304.0	0.40	117.39	304.0	-0.5	0.6	0.02	0.00	-3.23	0.0	0.0
366.0	0.30	106.39	366.0	-0.7	1.0	0.19	-0.16	-17.74	0.0	0.0
397.0	0.30	122.39	397.0	-0.7	1.1	0.27	0.00	51.61	0.0	0.0
429.0	0.30	30.39	429.0	-0.7	1.2	1.35	0.00	-287.50	0.0	0.0
461.0	0.20	125.39	461.0	-0.7	1.3	1.17	-0.31	286.87	0.0	0.0
492.0	0.50	64.39	492.0	-0.6	1.5	1.42	0.97	-196.77	0.0	0.0
523.0	0.10	326.39	523.0	-0.6	1.6	1.69	-1.29	-316.13	0.0	0.0
555.0	0.20	138.39	555.0	-0.6	1.6	0.94	0.31	537.50	0.0	0.0
587.0	0.60	46.39	587.0	-0.5	1.8	2.00	1.25	-287.50	0.0	0.0
608.0	0.60	72.39	608.0	-0.4	2.0	1.29	0.00	123.81	0.0	0.0
649.0	0.10	176.39	649.0	-0.4	2.2	1.54	-1.22	253.66	0.0	0.0
681.0	0.60	16.39	681.0	-0.2	2.2	2.17	1.56	-500.00	0.0	0.0



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Well:	#614H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
712.0	0.30	340.39	712.0	0.0	2.2	1.29	-0.97	-116.13	0.0	0.0	
744.0	0.60	13.39	744.0	0.2	2.3	1.20	0.94	103.12	0.0	0.0	
805.0	0.20	182.39	805.0	0.4	2.3	1.31	-0.66	277.05	0.0	0.0	
837.0	0.60	50.39	837.0	0.5	2.5	2.34	1.25	-412.50	0.0	0.0	
869.0	0.20	304.39	869.0	0.6	2.5	2.13	-1.25	-331.25	0.0	0.0	
900.0	0.20	132.39	900.0	0.6	2.5	1.29	0.00	-554.84	0.0	0.0	
1,086.0	0.20	64.50	1,086.0	0.5	3.1	0.12	0.00	-36.50	-0.3	0.0	
1,274.0	0.10	343.30	1,274.0	0.8	3.3	0.11	-0.05	-43.19	-0.3	-0.6	
1,462.0	0.20	317.60	1,462.0	1.2	3.0	0.06	0.05	-13.67	-0.5	-0.8	
1,649.0	0.40	320.30	1,649.0	2.0	2.4	0.11	0.11	1.44	-1.5	-0.7	
1,836.0	0.30	318.50	1,836.0	2.9	1.7	0.05	-0.05	-0.96	-2.6	-0.8	
2,024.0	0.30	314.90	2,024.0	3.6	1.0	0.01	0.00	-1.91	-3.5	-1.0	
2,211.0	0.20	10.00	2,211.0	4.2	0.7	0.13	-0.05	29.47	-3.4	2.7	
2,399.0	0.30	78.20	2,399.0	4.7	1.2	0.16	0.05	36.28	0.7	4.5	
2,585.0	0.80	106.20	2,585.0	4.4	3.0	0.30	0.27	15.05	1.0	3.9	
2,773.0	0.90	94.20	2,772.9	3.9	5.7	0.11	0.05	-6.38	-2.6	3.8	
2,959.0	1.20	89.30	2,958.9	3.8	9.1	0.17	0.16	-2.63	-6.3	3.4	
3,146.0	1.70	89.10	3,145.8	3.9	13.8	0.27	0.27	-0.11	-11.1	3.4	
3,334.0	2.50	88.80	3,333.7	4.0	20.7	0.43	0.43	-0.16	-18.0	3.3	
3,522.0	1.20	102.50	3,521.6	3.7	26.7	0.73	-0.69	7.29	-22.7	8.4	
3,710.0	1.40	224.60	3,709.6	1.6	27.0	1.21	0.11	64.95	17.9	16.4	
3,897.0	1.50	220.50	3,896.5	-1.9	23.9	0.08	0.05	-2.19	12.0	17.5	
4,085.0	1.40	211.20	4,084.5	-5.7	21.1	0.14	-0.05	-4.95	4.3	18.8	
4,273.0	1.30	228.60	4,272.4	-9.1	18.3	0.22	-0.05	9.26	5.4	17.3	
4,461.0	1.20	232.50	4,460.4	-11.7	15.1	0.07	-0.05	2.07	2.4	17.1	
4,648.0	0.90	175.60	4,647.3	-14.3	13.7	0.55	-0.16	-30.43	-15.5	9.7	
4,836.0	1.50	159.40	4,835.3	-18.1	14.7	0.36	0.32	-8.62	-21.5	4.6	



Midland PVA



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Project:	Lee County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3365.0usft
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Well:	#614H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Bulld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
5,023.0	1.30	149.30	5,022.3	-22.2	16.6	0.17	-0.11	-5.40	-26.5	0.3	
5,165.0	1.10	137.50	5,164.2	-24.6	18.3	0.22	-0.14	-8.31	-28.9	-4.7	
5,289.0	0.90	124.70	5,288.2	-26.0	19.9	0.24	-0.16	-10.32	-30.5	-5.9	
5,477.0	4.80	230.80	5,476.0	-31.9	15.1	2.72	2.07	56.44	13.7	31.3	
5,665.0	10.10	241.30	5,662.3	-44.8	-5.5	2.90	2.82	5.59	23.2	22.7	
5,759.0	10.60	242.50	5,754.8	-52.7	-20.4	0.58	0.53	1.28	21.5	18.4	
5,947.0	10.00	238.20	5,939.8	-69.3	-49.6	0.52	-0.32	-2.29	16.5	12.9	
6,135.0	10.20	237.90	6,124.9	-86.7	-77.6	0.11	0.11	-0.16	13.6	7.3	
6,323.0	8.80	235.70	6,310.3	-103.7	-103.6	0.77	-0.74	-1.17	12.5	2.7	
6,511.0	10.60	240.10	6,495.6	-120.4	-130.4	1.03	0.96	2.34	10.9	-3.9	
6,698.0	10.30	240.80	6,679.5	-137.1	-160.0	0.17	-0.16	0.37	6.5	-10.8	
6,887.0	9.80	233.50	6,865.6	-155.0	-187.6	0.72	-0.28	-3.88	5.5	-15.4	
7,074.0	9.20	227.00	7,050.0	-174.6	-211.4	0.66	-0.32	-3.48	6.8	-16.3	
7,262.0	8.90	226.00	7,235.7	-195.0	-232.8	0.18	-0.16	-0.53	8.2	-15.7	
7,449.0	10.00	221.20	7,420.2	-217.2	-253.9	0.72	0.59	-2.57	9.0	-12.9	
7,637.0	8.80	220.50	7,605.6	-240.5	-274.0	0.64	-0.64	-0.37	8.8	-9.4	
7,825.0	7.40	216.30	7,791.8	-261.1	-290.5	0.81	-0.74	-2.23	7.0	-5.0	
8,013.0	2.60	211.70	7,979.0	-274.5	-299.9	2.56	-2.55	-2.45	2.7	-2.2	
8,201.0	2.30	208.80	8,166.8	-281.5	-304.0	0.17	-0.16	-1.54	-3.8	-1.8	
8,388.0	1.10	103.10	8,353.7	-285.2	-304.0	1.50	-0.64	-56.53	2.0	-6.8	
8,576.0	1.10	109.50	8,541.7	-286.2	-300.6	0.07	0.00	3.40	-2.4	-6.8	
8,764.0	0.90	100.10	8,729.7	-287.0	-297.4	0.14	-0.11	-5.00	-4.5	-7.4	
8,951.0	0.70	99.40	8,916.7	-287.5	-294.9	0.11	-0.11	-0.37	-7.1	-7.4	
9,139.0	0.50	83.60	9,104.7	-287.6	-292.9	0.14	-0.11	-8.40	-6.7	-9.4	
9,327.0	0.30	193.80	9,292.7	-288.0	-292.2	0.35	-0.11	58.62	-6.7	10.3	
9,515.0	0.40	317.60	9,480.6	-288.0	-292.8	0.33	0.05	65.85	11.9	0.3	
9,702.0	0.70	19.60	9,667.6	-286.4	-292.8	0.33	0.16	33.16	4.4	-9.8	



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
9,890.0	1.20	30.70	9,855.6	-283.6	-291.4	0.28	0.27	5.90	-0.7	-10.2
10,078.0	2.20	78.90	10,043.5	-281.2	-286.9	0.88	0.53	25.64	-13.0	-4.9
10,265.0	2.00	135.00	10,230.4	-282.9	-281.1	1.06	-0.11	30.00	-16.5	11.1
10,453.0	0.90	296.70	10,418.4	-284.5	-280.1	1.53	-0.59	86.01	20.8	-4.3
10,641.0	1.00	311.90	10,606.4	-282.8	-282.6	0.14	0.05	8.09	15.9	-9.2
10,829.0	0.90	296.50	10,794.3	-281.0	-285.1	0.15	-0.05	-8.19	14.7	-5.1
11,016.0	0.60	1.30	10,981.3	-279.4	-286.4	0.45	-0.16	34.65	0.1	-14.2
11,204.0	1.30	349.70	11,169.3	-276.3	-286.8	0.38	0.37	-6.17	-0.2	-14.1
11,392.0	0.30	351.60	11,357.3	-273.7	-287.2	0.53	-0.53	1.01	-3.3	-14.0
11,579.0	0.30	186.70	11,544.3	-273.7	-287.4	0.32	0.00	-88.18	6.8	12.5
11,766.0	1.30	255.90	11,731.3	-274.7	-289.5	0.66	0.53	37.01	11.8	-1.5
11,929.0	1.00	259.70	11,894.2	-275.4	-292.7	0.19	-0.18	2.33	8.4	-2.1
12,003.0	0.90	259.70	11,968.2	-275.6	-293.9	0.14	-0.14	0.00	7.2	-2.1
12,050.0	1.41	289.41	12,015.2	-275.4	-294.8	1.85	1.08	84.44	3.3	-6.0
KOP 12050.0 MD: 12015.2 TVD: -275.4 -294.8 1.41										
12,056.0	1.50	302.20	12,021.2	-275.3	-294.9	1.85	1.55	46.73	2.9	-6.1
12,103.0	7.80	327.60	12,068.0	-272.3	-297.1	13.78	13.40	54.04	-1.0	-5.9
12,150.0	15.80	333.70	12,114.0	-263.9	-301.7	17.20	17.02	12.98	-3.8	-4.7
12,197.0	22.80	333.00	12,158.3	-250.0	-308.6	14.90	14.89	-1.49	-7.5	-3.4
12,244.0	26.50	338.10	12,201.1	-232.1	-316.7	9.07	7.87	10.85	-11.1	-1.6
12,291.0	32.10	344.70	12,242.0	-210.4	-323.9	13.74	11.91	14.04	-13.7	-1.1
12,337.0	40.00	344.80	12,279.2	-184.3	-331.0	17.17	17.17	0.22	-17.0	-3.4
12,384.0	44.70	341.00	12,313.9	-154.0	-340.4	11.38	10.00	-8.09	-20.5	-6.0
12,431.0	49.70	339.20	12,345.9	-121.6	-352.1	11.00	10.64	-3.83	-23.2	-6.8
12,477.0	52.40	341.00	12,374.8	-88.0	-364.3	6.61	5.87	3.91	-25.0	-5.1
12,524.0	56.60	342.30	12,402.1	-51.7	-376.3	9.22	8.94	2.77	-25.1	-2.4
12,571.0	63.00	345.20	12,425.7	-12.7	-387.7	14.62	13.62	6.17	-25.1	1.2



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12,584.3	64.30	345.78	12,431.6	-1.1	-390.6	10.52	9.77	4.37	-25.2	2.1
FTP Crossing 12584.3' MD; 12431.6' TVD; -1.1°; -390.6°; 64.30										
12,618.0	67.60	347.20	12,445.3	28.8	-397.8	10.52	9.80	4.21	-25.0	4.7
12,665.0	71.10	350.90	12,461.9	71.9	-406.2	10.47	7.45	7.87	-23.6	8.0
12,712.0	77.50	355.20	12,474.6	116.8	-411.6	16.21	13.62	9.15	-21.7	9.6
12,759.0	81.10	359.10	12,483.3	162.9	-413.9	11.19	7.66	8.30	-19.4	9.3
12,807.0	84.80	0.50	12,489.2	210.5	-414.0	8.23	7.71	2.92	-15.6	8.2
12,854.0	86.40	0.60	12,492.8	257.4	-413.6	3.41	3.40	0.21	-11.6	7.3
12,900.0	88.60	0.80	12,494.9	303.4	-413.0	4.80	4.78	0.43	-9.2	6.4
12,994.0	89.60	2.00	12,496.3	397.3	-410.7	1.66	1.06	1.28	-7.0	3.3
13,088.0	89.60	359.80	12,497.0	491.3	-409.3	2.34	0.00	-2.34	-5.5	1.0
13,181.0	90.50	0.80	12,496.9	584.3	-408.8	1.45	0.97	1.08	-4.8	-0.3
13,287.0	89.80	358.30	12,496.6	690.3	-409.6	2.45	-0.66	-2.36	-4.2	-0.4
13,381.0	90.80	0.40	12,496.1	784.3	-410.7	2.47	1.06	2.23	-3.9	-0.1
13,475.0	92.80	4.10	12,493.2	878.1	-407.0	4.47	2.13	3.94	-6.1	-4.6
13,568.0	92.50	3.50	12,488.9	970.8	-400.8	0.72	-0.32	-0.65	-9.6	-11.6
13,662.0	91.10	0.30	12,485.9	1,064.7	-397.7	3.71	-1.49	-3.40	-11.8	-15.5
13,756.0	88.60	359.20	12,486.2	1,158.7	-398.1	2.91	-2.66	-1.17	-10.8	-15.9
13,850.0	89.60	359.70	12,487.6	1,252.7	-399.0	1.19	1.06	0.53	-8.5	-15.8
13,944.0	91.20	0.60	12,487.0	1,346.7	-398.8	1.95	1.70	0.96	-8.4	-16.8
14,037.0	90.10	0.30	12,485.9	1,439.7	-398.1	1.23	-1.18	-0.32	-8.6	-18.3
14,131.0	89.30	358.10	12,486.4	1,533.6	-399.4	2.49	-0.85	-2.34	-7.4	-17.8
14,225.0	91.60	359.80	12,485.7	1,627.6	-401.1	3.04	2.45	1.81	-7.3	-16.9
14,318.0	91.40	359.60	12,483.3	1,720.6	-401.6	0.30	-0.22	-0.22	-9.0	-17.2
14,412.0	89.70	358.90	12,482.4	1,814.6	-402.8	1.96	-1.81	-0.74	-9.1	-16.8
14,506.0	89.40	358.40	12,483.1	1,908.5	-405.0	0.62	-0.32	-0.53	-7.6	-15.4
14,599.0	90.50	359.30	12,483.2	2,001.5	-406.9	1.53	1.18	0.97	-6.7	-14.3



Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #614H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3365.0usft
Site:	Condor 32 State Com	MD Reference:	KB = 25 @ 3365.0usft
Well:	#614H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
14,893.0	88.80	359.20	12,483.7	2,085.5	-408.1	1.81	-1.81	-0.11	-5.3	-13.9
14,787.0	88.90	359.10	12,485.6	2,189.5	-409.5	0.15	0.11	-0.11	-2.7	-13.3
14,881.0	89.90	359.90	12,486.6	2,283.5	-410.3	1.36	1.06	0.85	-0.9	-13.3
14,975.0	90.80	0.50	12,486.0	2,377.5	-410.0	1.15	0.96	0.64	-0.7	-14.4
15,069.0	90.70	1.40	12,484.8	2,471.5	-408.4	0.96	-0.11	0.96	-1.1	-16.8
15,163.0	90.40	1.00	12,483.9	2,565.4	-406.5	0.53	-0.32	-0.43	-1.2	-19.5
15,184.0	90.60	0.70	12,483.7	2,586.4	-406.2	1.72	0.95	-1.43	-1.2	-20.0
15,278.0	90.10	358.60	12,483.2	2,680.4	-406.7	2.30	-0.53	-2.23	-1.0	-20.3
15,372.0	91.00	358.30	12,482.3	2,774.4	-409.3	1.01	0.96	-0.32	-1.1	-18.5
15,466.0	89.70	359.00	12,481.7	2,868.4	-411.5	1.57	-1.38	0.74	-0.9	-17.1
15,560.0	90.00	358.90	12,481.9	2,962.3	-413.2	0.34	0.32	-0.11	0.1	-16.2
15,653.0	92.00	358.60	12,480.3	3,055.3	-415.2	2.17	2.15	-0.32	-0.7	-15.0
15,747.0	90.80	358.50	12,478.0	3,149.2	-417.6	1.28	-1.28	-0.11	-2.3	-13.4
15,841.0	89.80	358.60	12,477.5	3,243.2	-420.0	1.07	-1.06	0.11	-2.0	-11.8
15,935.0	90.90	358.10	12,476.9	3,337.2	-422.7	1.29	1.17	-0.53	-1.7	-9.9
16,029.0	91.20	356.90	12,475.2	3,431.1	-426.8	1.32	0.32	-1.28	-2.7	-6.6
16,123.0	90.60	355.50	12,473.7	3,524.8	-433.0	1.62	-0.64	-1.49	-3.4	-1.2
16,217.0	90.40	357.20	12,472.9	3,618.6	-439.0	1.82	-0.21	1.81	-3.4	4.0
16,311.0	90.00	1.30	12,472.6	3,712.6	-440.3	4.38	-0.43	4.36	-2.9	4.4
16,405.0	90.40	1.00	12,472.3	3,806.6	-438.4	0.53	0.43	-0.32	-2.5	1.7
16,498.0	91.50	1.30	12,470.7	3,899.6	-436.5	1.23	1.18	0.32	-3.2	-0.9
16,592.0	89.70	1.30	12,469.7	3,993.5	-434.4	1.91	-1.91	0.00	-3.4	-3.9
16,686.0	90.80	359.60	12,469.3	4,087.5	-433.6	2.15	1.17	-1.81	-3.1	-5.4
16,780.0	91.90	358.80	12,467.1	4,181.5	-434.9	1.45	1.17	-0.85	-4.5	-4.9
16,873.0	91.10	359.20	12,464.7	4,274.4	-436.6	0.96	-0.86	0.43	-6.1	-4.1
16,967.0	89.40	359.10	12,464.3	4,368.4	-438.0	1.81	-1.81	-0.11	-5.8	-3.5
17,060.0	90.60	359.80	12,464.3	4,461.4	-438.9	1.49	1.29	0.75	-5.0	-3.4



Midland PVA



Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Condor 32 State Com
Well: #614H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #614H
TVD Reference: KB = 25 @ 3365.0usft
ND Reference: KB = 25 @ 3365.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
17,154.0	92.10	0.00	12,462.1	4,555.4	-439.0	1.61	1.60	0.21	-6.4	-4.0	
17,248.0	92.00	0.10	12,458.7	4,649.3	-438.9	0.15	-0.11	0.11	-9.0	-4.9	
17,341.0	93.90	0.30	12,453.9	4,742.2	-438.6	2.05	2.04	0.22	-13.0	-6.0	
17,434.0	91.40	358.80	12,449.6	4,835.1	-439.3	3.13	-2.69	-1.61	-16.5	-6.1	
17,528.0	88.80	0.10	12,449.4	4,929.1	-440.2	3.09	-2.77	1.38	-15.9	-6.0	
17,621.0	78.90	2.70	12,459.4	5,021.4	-438.0	11.00	-10.65	2.80	-5.2	-9.0	
17,716.0	78.90	1.00	12,477.7	5,114.6	-435.0	1.76	0.00	-1.79	13.7	-13.0	
17,809.0	85.30	1.10	12,490.5	5,206.6	-433.3	6.88	6.88	0.11	27.4	-15.4	
17,903.0	93.80	359.20	12,491.2	5,300.5	-433.1	9.27	9.04	-2.02	29.0	-16.4	
17,997.0	96.00	359.70	12,483.2	5,394.2	-434.0	2.40	2.34	0.53	21.7	-16.3	
18,091.0	97.00	359.70	12,472.5	5,487.6	-434.5	1.06	1.06	0.00	11.8	-16.6	
18,185.0	92.90	359.10	12,464.4	5,581.1	-435.4	4.41	-4.36	-0.84	4.5	-16.4	
18,279.0	93.10	358.40	12,459.5	5,675.0	-437.5	0.77	0.21	-0.74	0.4	-15.1	
18,372.0	94.10	358.40	12,453.7	5,767.8	-440.1	1.08	1.08	0.00	-4.7	-13.3	
18,466.0	90.50	0.00	12,449.9	5,861.7	-441.4	4.19	-3.83	1.70	-7.6	-12.8	
18,560.0	90.40	359.00	12,449.2	5,955.7	-442.2	1.07	-0.11	-1.06	-7.6	-12.8	
18,653.0	91.40	359.10	12,447.7	6,048.6	-443.7	1.08	1.08	0.11	-8.3	-12.1	
18,747.0	91.90	359.10	12,445.0	6,142.6	-445.2	0.53	0.53	0.00	-10.2	-11.4	
18,841.0	90.20	0.50	12,443.3	6,236.6	-445.5	2.34	-1.81	1.49	-11.1	-11.9	
18,935.0	90.90	0.60	12,442.4	6,330.5	-444.6	0.75	0.74	0.11	-11.2	-13.6	
19,029.0	92.40	1.30	12,439.7	6,424.5	-443.1	1.76	1.60	0.74	-13.1	-15.9	
19,122.0	93.70	359.60	12,434.7	6,517.4	-442.4	2.30	1.40	-1.83	-17.3	-17.5	
19,217.0	91.30	358.40	12,430.6	6,612.2	-444.0	2.82	-2.53	-1.26	-20.7	-16.6	
19,310.0	90.90	359.60	12,428.8	6,705.2	-445.6	1.36	-0.43	1.29	-21.7	-15.8	
19,404.0	88.30	358.90	12,429.4	6,799.2	-446.9	2.86	-2.77	-0.74	-20.2	-15.4	
19,498.0	89.30	359.00	12,431.4	6,893.1	-448.6	1.07	1.06	0.11	-17.5	-14.4	
19,592.0	90.50	0.30	12,431.6	6,987.1	-449.2	1.88	1.28	1.38	-16.5	-14.7	



Midland PVA



Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #614H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3365.0usft
Site:	Condor 32 State Corn	MD Reference:	KB = 25 @ 3365.0usft
Well:	#614H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
19,686.0	92.00	0.70	12,429.5	7,081.1	-448.3	1.65	1.60	0.43	-17.8	-16.3
19,780.0	93.70	1.00	12,424.8	7,175.0	-447.0	1.84	1.81	0.32	-21.7	-18.5
Last MWD Survey (MD = 19780.0)										
19,850.0	93.70	1.00	12,420.3	7,244.8	-445.7	0.00	0.00	0.00	-25.6	-20.3
Projection to Bit (MD = 18850.0)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
12,050.0	12,015.2	-275.4	-294.8	KOP 12050.0' MD; 12015.2' TVD; -275.4'; -294.8'; 1.41
12,584.3	12,431.6	-1.1	-390.6	FTP Crossing 12584.3' MD; 12431.6' TVD; -1.1'; -390.6'; 64.30
19,780.0	12,424.8	7,175.0	-447.0	Last MWD Survey (MD = 19780.0)
19,850.0	12,420.3	7,244.8	-445.7	Projection to Bit (MD = 18850.0)

Checked By: _____ Approved By: _____ Date: _____



Lea County, NM (NAD 83 NME)

Condor 32 State Com #614H

Plan #1

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #614H

KB = 25 @ 3365.0ust 3340.0
Northing 394082.00 Easting 801320.00 Latitude 32° 4' 50.270 N Longitude 103° 29' 38.132 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	900.0	0.20	132.39	900.0	0.6	2.5	0.00	0.00	0.5	
2	1000.0	0.20	132.39	1000.0	0.4	2.8	0.00	0.00	0.2	
3	1010.0	0.00	0.00	1010.0	0.4	2.8	2.00	180.00	0.2	
4	5100.0	0.00	0.00	5100.0	0.4	2.8	0.00	0.00	0.2	
5	5568.3	9.37	227.36	5568.2	-25.3	-25.3	2.00	227.36	-23.8	
6	7633.4	9.37	227.36	7603.8	-253.1	-272.5	0.00	0.00	-235.4	
7	8101.7	0.00	0.00	8070.0	-279.0	-300.6	2.00	180.00	-259.4	Brushy Top (Condor 32 SC #614H)
8	12047.4	0.00	0.00	12015.7	-279.0	-300.6	0.00	0.00	-259.4	
9	12427.4	45.58	339.55	12356.9	-144.7	-350.7	11.99	339.55	-122.2	
10	12829.8	90.48	359.51	12504.9	212.5	-405.9	12.00	27.21	237.8	
11	19974.8	90.48	359.51	12445.0	7357.0	-467.0	0.00	0.00	7371.8	PBHL (Condor 32 SC #614H)

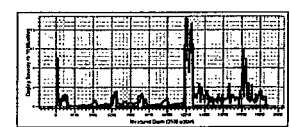
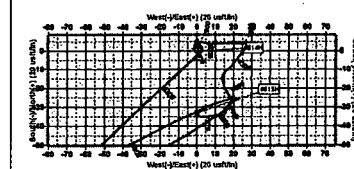
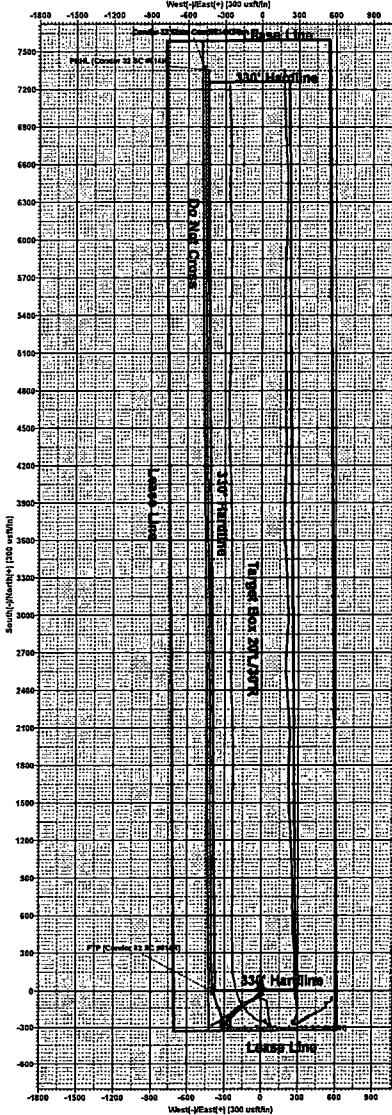
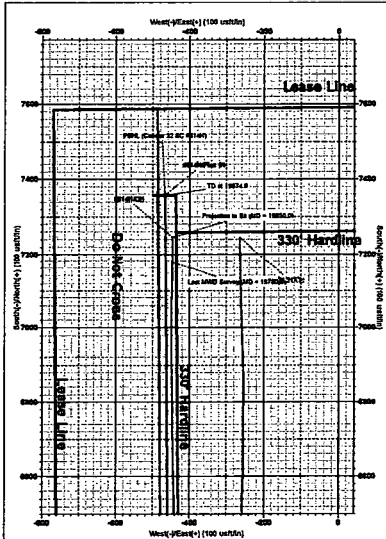
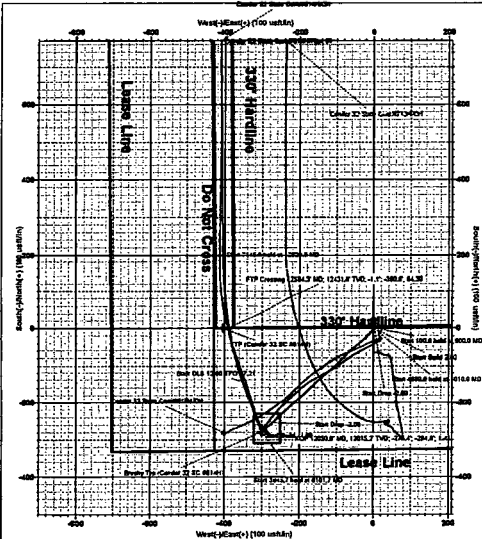
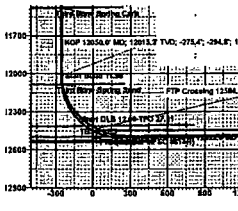
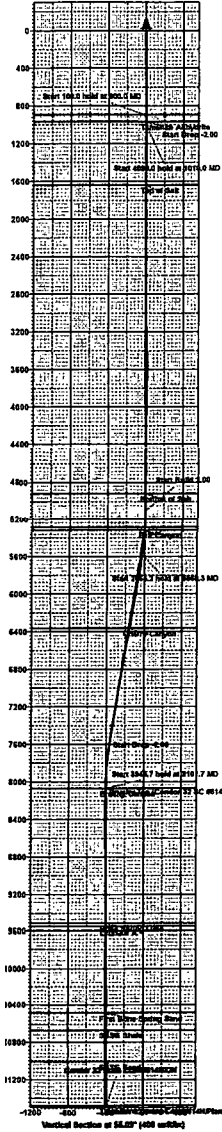
To convert a Magnetic Direction to a Grid Direction, Add 6.33°
To convert a Magnetic Direction to a True Direction, Add 6.81° East
To convert a True Direction to a Grid Direction, Subtract 6.45°

CASINGS DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
Brushy Top (Condor 32 SC #614H)	8070.0	-279.0	-300.6	393803.01	801618.40
PBHL (Condor 32 SC #614H)	12445.0	7357.0	-467.0	401438.00	800653.00
FTP (Condor 32 SC #614H)	12510.0	1.0	-455.0	394082.00	800915.00



Lea County, NM (NAD 83 NME)
Condor 32 State Com #614H
Plan #1